

**WEST**

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L1: Entry 1 of 2

File: EPAB

Oct 28, 1993

PUB-NO: WO009321028A1  
DOCUMENT-IDENTIFIER: WO 9321028 A1  
TITLE: TYRE PROTECTOR

PUBN-DATE: October 28, 1993

## INVENTOR-INFORMATION:

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APPL-NO: RU09200039

APPL-DATE: February 28, 1992

PRIORITY-DATA: RU09200039W (February 28, 1992)

US-CL-CURRENT: 152/209.12

INT-CL (IPC): B60C 11/04

EUR-CL (EPC): B60C011/08; B60C011/11

## ABSTRACT:

The present tyre protector comprises main grousers (2) and auxiliary grousers (14), each of them containing two pushing surfaces (3 and 4) and a supporting surface (5) located therebetween. The pushing surfaces (3 and 4) are identically oriented in the moving direction and have a different height. In the protector cross section, parallel to the equatorial plane (15) of the tyre, the line (6) which connects the points (7 and 8) of the pushing surfaces (3 and 4) of the grouser (2, 14) forms, at the point of its conjugation with the pushing surface of a smaller height, and angle (  $\alpha$  ) with the radius (R).

**WEST****End of Result Set**

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L1: Entry 2 of 2

File: DWPI

Oct 28, 1993

DERWENT-ACC-NO: 1993-351504

DERWENT-WEEK: 199344

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TITLE: Tractor or heavy vehicle tyre tread - has main and auxiliary projections with thrust surfaces and supporting surfaces of different heights for improved grip on soft ground

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PATENT-ASSIGNEE:

ASSIGNEE

CODE

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MATSI

PRIORITY-DATA: 1992WO-RU00039 (February 28, 1992)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 9321028 A1	October 28, 1993	R	033	B60C011/04

DESIGNATED-STATES: JP US AT BE CH DE DK ES FR GB GR IT LU MC NL SE

CITED-DOCUMENTS:DE 3913199; SU 105380 ; SU 1133122 ; US 3844326

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
WO 9321028A1	February 28, 1992	1992WO-RU00039	

INT-CL (IPC): B60C 11/04

ABSTRACTED-PUB-NO: WO 9321028A

BASIC-ABSTRACT:

Tread has a series of main and auxiliary projecting blocks, each of which has two supporting surfaces (3,4) and a thrust surface (5) between them. The projections are made with supporting surfaces of different heights while being inclined in the direction of travel. In a section of the tread, parallel to its equatorial plane a line (6) connecting the points (7,8) of the supporting surfaces which are furthest from the axis of the tyre, form an angle with the tyre's radius which is defined by the formula  $\arctg R + hy(t/s)$  (I) where R is the radius of the tyre at the base of the projections, and hy and t are respectively the height and width of a projection.

The thrust surfaces of the projections can be straight, concave or convex, or a combination of these.

ADVANTAGE - Tyre has improved grip on soft ground.

CHOSEN-DRAWING: Dwg.2/21

TITLE-TERMS: TRACTOR HEAVY VEHICLE TYRE TREAD MAIN AUXILIARY PROJECT THRUST SURFACE

SUPPORT SURFACE HEIGHT IMPROVE GRIP SOFT GROUND

DERWENT-CLASS: A95 Q11

CPI-CODES: A12-T01B;

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1] 017 ; H0124\*R Polymer Index [1.2] 017 ; ND01 ; Q9999 Q9256\*R Q9212  
; Q9999 Q9234 Q9212 ; K9416 ; B9999 B5367 B5276

POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:

Key Serials: 0009 0231 2658 2826 3258 3300

Multipunch Codes: 017 032 04- 41& 50& 57& 597 599 651 672

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1993-155984

Non-CPI Secondary Accession Numbers: N1993-271185

09/673738

L Number	Hits	Search Text	DB	Time stamp
1	42904	tire and tread	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:56
2	2139865	block	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:56
3	39827	block same height	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:57
4	687	(block same height) same decrease	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:57
5	215	(block same height) same decreasing	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:57
6	278	(block same height) same decreased	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:57
7	24	((block same height) same decrease) same tread	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:57
8	16	((block same height) same decreasing) same tread	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:58
9	12	((block same height) same decreased) same tread	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 13:58
10	44	((block same height) same decrease) same tread) or ((block same height) same decreasing) same tread) or ((block same height) same decreased) same tread)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:00
11	132387	block same pressure	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:01
12	467	(block same pressure) same tread	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:01
13	413	(tire and tread) and ((block same pressure) same tread)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:12

14	48752	block with center	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:13
16	397	(block with center) with concave	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:14
17	583	(block with center) with curved	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:14
18	942	((block with center) with concave) or ((block with center) with curved)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:14
19	31	(tire and tread) and (((block with center) with concave) or ((block with center) with curved))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:16
20	1082	block with protuber\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:16
21	5	(tire and tread) and (block with protuber\$)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:16
22	6209	block with protrusion	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:17
23	1098	block with bump	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:17
24	7278	(block with protrusion) or (block with bump)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:17
25	68	(tire and tread) and ((block with protrusion) or (block with bump))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:19
26	16176	suction adj1 cup	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:21
27	60	(tire and tread) and (suction adj1 cup)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:23
28	5210	(block with center) same edge	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:24

29	15661	(block with center) same end	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:24
30	18688	((block with center) same edge) or ((block with center) same end)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:24
31	568	(tire and tread) and (((block with center) same edge) or ((block with center) same end))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:24
32	2827	(block with center) with edge	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:24
33	9076	(block with center) with end	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:24
34	11118	((block with center) with edge) or ((block with center) with end)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:24
35	394	(tire and tread) and (((block with center) with edge) or ((block with center) with end))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/12/04 14:45